### **REMARKS**

Applicant appreciates the time taken by the Examiner to review Applicant's present application. Applicant has amended Claims 1, 3, 20 and 27-31 and added Claim 38. Applicant submits that no new matter has been added by these amendments. Therefore, Claims 1-38 remain pending in the application. This application has been carefully reviewed in light of the Official Action mailed August 30, 2004. Applicant respectfully requests reconsideration and favorable action in this case.

## Rejections under 35 U.S.C. § § 102 & 103

Claims 1-37 stand rejected as anticipated by U.S. Patent No. 5,651,123 ("Nakagawa") or as obvious over Nakagawa in view of U.S. Patent No. 5,490,280 ("Gupta"), U.S. Patent No. 5,530,837 ("Williams") or U.S. Patent No. 6,389,562 ("Kondo"). Applicant respectfully traverses these rejections.

In order for a claim to be anticipated, a prior art reference must disclose "each and every element as set forth in the claim." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as contained in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 122, 1239 (Fed. Cir. 1989). Moreover, "the elements must be arranged as required by the claim." *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990). Applicants respectfully point out that Nakagawa does not anticipate the present invention as it does not disclose every element of Claim 1.

# Independent Claims 1, 20 and 31

Claim 1, as amended, recites "an apparatus for allocating one or more resources within a processor to an instruction, the apparatus comprising: a sequence generator that generates one or more resource identifiers using at least a portion of a pseudorandom sequence, each resource identifier corresponding to one of the resources within the processor, and a resource identifier selector coupled to the sequence generator, the resource identifier selector selecting one or more of the resource identifiers for allocation to the instruction." Claims 20 and 31 recite similar limitations. Thus, the invention of Claims 1, as amended, generates resource identifiers which correspond to resources within the execution path of a processor (such as a reorder buffer entry). Once an instruction has been fetched, the processor resource

requirements of an instruction may be determined, and based on the requirements of the instruction the resource identifier selector may select one or more of the resource identifiers for allocation to the instruction.

Nakagawa does not relate to allocation of resources within a processor. Instead, Nakagawa relates to program execution control devices for storing instructions to addresses of memory, wherein these addresses are sequentially designated in accordance with an M series pseudo-random number sequence in the order of program addresses of each instruction. The instructions may then be fetched from memory using a feedback shift register for generating pseudo-random numbers in accordance with the M series pseudo-random number sequence and read from the instruction memory according to addressing based on the generated pseudo-random number. (See Col. 3, Line 9 – Col. 4, Line 26) These instructions are read from the instruction memory into a processor for execution. Consequently, Nakagawa deals with the accessing of resources external to a processor, namely, instruction memories, through pseudo-random number based addressing; not the allocation of resources within a processor as recited by Claim 1.

Similarly, Claim 1 recites a sequence generator that generates one or more resource identifiers, each resource identifier corresponding to one of the resources within the processor, As discussed above, Nakagawa designates addresses of a program memory not resources within the processor. Nakagawa generates program addresses corresponding to locations in an instruction memory based on the pseudo-random number generator, not resource identifiers corresponding to one of the resources within the processor, as does the sequence generator recited in Claim 1. Consequently, the pseudo-random number generator of Nakagawa cannot function as the sequence generator of Claim 1.

Accordingly, as Nakagawa does not disclose all the limitations of Claim 1, Applicant respectfully requests the withdrawal of the rejection of Claim 1. Additionally, as Claims 20 and 31 recite substantially the same limitations as Claim 1, Applicant respectfully requests the withdrawal of the rejection of these claims as well.

### Dependent Claims 2-19, 21-30 and 32-37

As dependent Claims 2-19, 21-30 and 32-37 are further limitations on patentable Claims 1, 20 or 31, Applicant respectfully submits that these claims are allowable as well. Therefore, Applicant respectfully requests the withdrawal of the rejection of dependent Claims 2-19, 21-30 and 32-37.

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## New Claim 38

Applicant has added Claim 38 in order to more particularly point out and claim the invention. Applicant respectfully submits that no new matter has been added. Claim 38 recites "an apparatus for allocating one or more resources within the execution path of a processor to an instruction." As discussed above, Nakagawa deals with the accessing of resources external to a processor, not the allocation of resources within the execution path of a processor as recited by Claim 38. Consequently, Applicant respectfully requests the allowance of Claim 38.

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### CONCLUSION

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-38. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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